



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8

999 18TH STREET - SUITE 500

DENVER, CO 80202-2466

<http://www.epa.gov/region08>

Ref: EPR-ER

INITIAL POLLUTION REPORT

Intermountain Insulation Site

Salt Lake City, Utah

I. HEADING

Date: January 6, 2003
From: Joyce Ackerman, On-Scene Coordinator
Agency: EPA
Unit: Region VIII - Emergency Response Program
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To: Kevin Mould, EPA Headquarters
POLREP No.: Initial
Site: Intermountain Insulation Site

II. BACKGROUND

Site Number: 08DB
Party Conducting the Action: EPA
Response Authority: CERCLA
CERCLIS No: UT0010165126
NPL Status: No
Action Memorandum Status: NA

III. SITE INFORMATION

A. Incident Category

Removal Evaluation

B. Site Description

1. Site Description

This is one of many facilities that received vermiculite from a mine in Libby, Montana. The mine in Libby produced about 80% of the world's supply of vermiculite at one time and shipped vermiculite ore to various locations throughout the United States. The Libby vermiculite is co-mingled with amphibole asbestos of the tremolite-actinolite-richterite-winchite solution series and, as a result, there is asbestos contamination at many of the facilities which received vermiculite ore from the Libby mine.

The Intermountain Insulation facility received vermiculite ore in rail cars and “exfoliated” it, which means it was expanded in a furnace. The exfoliated vermiculite was sold as an insulation product, also known as “Zonolite.” The property and buildings are currently owned by the Simons X-Ray business.

The exfoliation plant was originally located in downtown Salt Lake City and was named Vermiculite Intermountain Inc. The original plant operated from the 1940s to the 1980s. This original site is also undergoing a removal evaluation and is discussed in a separate report.

In 1984, the Vermiculite Intermountain business was moved to 733 West 800 South. The name was changed at some point prior to this to Intermountain Insulation. The Intermountain Insulation business operated at the new location until 1987. The Simons X-Ray business purchased the property in 1991. An environmental assessment was conducted prior to this purchase and reportedly did not identify the presence of asbestos at the site. Mr. Simons conducts his X-Ray equipment refurbishment business on a property adjacent to the site, and he leases out the exfoliation building to other businesses. Mr. Simons stores antique cars in the dirt lot behind the exfoliation building. The dirt lot where the railroad spur was located has a different property owner.

The surrounding neighborhood is primarily industrial and commercial.

2. Physical Location

The Site is located at 733 West 800 South in Salt Lake City, Utah.

3. Removal Site Evaluation and Site Characteristics

The former exfoliation facility consists of a single building, a dirt lot behind the building, and dirt lot where the railroad spur was located. The railroad spur was removed sometime prior to my site visits. During my initial site visit, the building was leased to an auto body shop which has since moved out and is currently leased to a mattress factory.

During my site visits, I did not see any visible vermiculite inside the building. This may be because the auto body business washed down the inside of the building approximately once per week and the exfoliation plant only operated 3 years at this location.

In the dirt lot behind the building, there is visible vermiculite on the ground surface in many locations, including several inches of vermiculite dust where the storage silos were located. Nearly all the bulk samples of vermiculite have shown the presence of amphibole asbestos. All detections from the PLM analysis to date have been concentrations of less than 1 percent asbestos. These are lower concentrations than have been observed at other exfoliation plants in Region 8 and may be because the plant only operated 3 years at this location.

In October 2002, EPA and its contractors performed air monitoring in the dirt lot behind the exfoliation building while conducting two scenarios to measure potential exposure when the ground surface is disturbed. The first scenario consisted of raking the ground for 5 minutes and resting for 10 minutes. This

scenario was conducted for 4 hours. The second scenario consisted of blowing the ground with a leaf blower for 5 minutes and resting for 25 minutes. This scenario was stopped during the second round of leaf blowing because a substantial amount of dust was generated that could have migrated to other properties.

The air monitoring included both stationary perimeter samples and personal air samples attached to the contractor conducting the scenario.

Both scenarios yielded results well in excess of the OSHA permissible exposure level for asbestos which is 0.1 structures/cc. Raking yielded results up to 0.6 structures/cc and leaf blowing yielded results up to 0.8 structures/cc but probably would have been even higher if this scenario had not been halted.

Based on these air monitoring results, I anticipate that a removal action will be necessary at this site. The next step will be to conduct additional soil sampling to determine the horizontal and vertical extent of contamination. It is likely that more air monitoring will be conducted, including inside the building.

4. Description of Threat

Asbestos is of concern because chronic inhalation exposure to excessive levels of asbestos fibers suspended in air can result in lung diseases such as asbestosis, mesothelioma, and lung cancer. Subacute exposures as short as a few days have been shown to cause mesothelioma. Asbestos is a hazardous substance as defined by 40 CFR Section 302.4 of the NCP.

5. State and Local Role

EPA has kept the Utah Department of Environmental Quality apprised of the sampling events and results. Neither the State nor local agencies have the resources to conduct the needed site investigations or clean-ups independently. The UDEQ has assisted EPA in many facets of the removal evaluation, most notably in locating the exfoliation facilities since no addresses were available at the beginning of the investigation.

B. Future Plans

EPA will conduct additional sampling to determine the extent of contamination.

C. Key Issues

None at this time.